

Transliterating Icelandic Names into Japanese – the influence of knowledge of the target language

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1. Introduction One of the first requirements for Icelandic students learning Japanese is to know how their names should be pronounced in the target language. Icelandic speakers must be able to recognize their own names, but at the same time, the names must be made to fit into the Japanese sound system. The transliteration of Icelandic proper names into Japanese has not been fully systematized as yet, especially with words that contain sounds that are specific to Icelandic.

When foreign names are transliterated into Japanese, the sounds are changed phonologically to fit into the Japanese phonological system, before being transcribed into *katakana* (Ishiwata, 2001). Students of Japanese not only have to learn the sounds of *katakana* words, but also learn the phonological processes by which words are fitted into the Japanese phonological system. For example, the English word ‘set’ is transliterated into /se Q to/¹, inserting a geminate after a short vowel /e/, and inserting a vowel /o/ after the word final consonant /t/.² The learner can, then, guess the word ‘pet’ would be transliterated /pe Q to/. Understanding the difficulties students face in the transliteration of their own names may help us understand some of the general pronunciation problems confronting Icelandic learners of Japanese.

Transliterating sounds between languages that use very different orthographic systems and sound systems such as Japanese and English or English and Arabic can be difficult (Knight & Graehl, 1998). There can be several possible ways to transliterate a word, depending on how closely the *katakana* word is made to resemble the original pronunciation or how much the word is changed towards Japanese patterns and therefore made to sound like a Japanese word. There are also personal preferences, as to which version of the transliteration is chosen. In the case of loan words, a word is transliterated into *katakana*, but there are often inconsistencies between spelling and pronunciation. Place/personal names tend to be transliterated more freely, often closer to the original pronunciation, rather than fitting strictly into the sound system of the target language. The National Language Council of Japan has published a series of guidelines for transcribing loan words, but at the same time, recommends that the guidelines should not be too strictly imposed, especially with regard to proper names. (Ishiwata, 2001)

Perception of what comes closest to the original pronunciation may vary depending on the listener. When Icelandic names are transliterated into Japanese, Japanese and Icelandic speakers may disagree on what sounds most like the original pronunciation. Whether the Icelandic speaker has any knowledge of Japanese may also affect his/her perception. If, after being transliterated into Japanese, an Icelandic name comes to contain a sound that does not exist in Icelandic and therefore is a problematic sound, the learners’ degree of familiarity with that sound may affect their transliteration preference. If a learner has not yet acquired the sound and therefore cannot recognize it, his/her choice between transliterations containing or omitting the sound will be random. Icelandic speakers who have learned the sound, however, will show some kind of tendency in their transliteration preference. In this exploratory study, we observe the learners’ preferences for certain transliterations of their names, and see how the learners’ knowledge of Japanese affects their choices. The sounds included in the analyses are geminate insertion, unaspirated plosives, and nasal

¹ Q represents the first element of the geminate in Japanese and forms one mora on its own.

² Consonant clusters are not allowed in Japanese, except for the special moraic consonants. In the transliteration process, a vowel is inserted, CC→CVC. The vowel is normally /u/, but when the preceding consonant is /t/ or /d/, /o/ is inserted because /tu/ and /du/ are not originally in Japanese native sound syllabary.

plosion. The first two are sounds that are difficult for Icelandic learners to acquire in Japanese, and nasal plosion is the sound feature which does not exist in Japanese. The focus of interest is to see whether there are differences between groups of subjects over what is judged as the closest to the original sound.

2. The study A perception test was conducted to see which possible way of transliterating Icelandic personal names into Japanese would come closest to the original Icelandic pronunciation in the subjects' estimation. The study aims to discover whether there is any difference in the estimation as the learners' knowledge in Japanese develops, as well as difference between Japanese and Icelandic subjects' perception on what comes closest to the pronunciation of the original language.

2.1 Subjects: 1) first-year Icelandic students of Japanese (13; 4 male, 9 female), 2) second-year Icelandic students of Japanese (8; 4 male, 4 female)³, 3) Japanese native speakers (9; 1 male, 8 female). There was an imbalance in the distribution of male and female students in groups 1) and 3), due to the limited number of native Icelandic speakers studying Japanese, as well as of native Japanese speakers living in Iceland. Due to these limitations, and the nature of this exploratory study as such, a broad observation of tendencies is offered in preference to statistical analysis.

2.2 Tokens (Types of sounds in question): The Icelandic names that contain the following sounds are chosen. Each token was read with the versions presented as choices, e.g. *Diðrik* as /ði zu ri ku/, /ði zu ri k ku/, and /ði zu ri l ku/ ;

Types of sounds	tokens	choices
Geminate insertion	<i>Diðrik</i> , <i>Frðrik</i>	/-iku/, /-ikku/, /-i:ku/ (/#/, /Q/, /R/)
Unaspirated plosives	<i>Dagmar</i> , <i>Birta</i> , <i>Bergur</i> , <i>Gísli</i> , <i>Hjörðís</i> , <i>Bergur</i> , <i>Helgi</i> , <i>Ragnheiður</i> , <i>Ragnar</i> , <i>Sindri</i>	voiced, voiceless
Nasal plosion : /tn/ (/dn/)	<i>Árni</i> , <i>Birna</i> , <i>Arnar</i> , <i>Arnór</i>	/-run-/, /-ruton-/, /-tton-/, /-rutton-/

Table 1 Three types of sounds observed in the test.

2.2.1 Geminate: When English words are transliterated into Japanese, an extra consonant tends to be inserted between a monophthong and a consonant, creating a geminate (Suzuki, 1995). For example, the English name *Pat* will be transliterated into /pa t to/ (/pa Q to/). Modern Tokyo dialect is said to have a mora unit, distinct from a syllable (Kubozono, 1999). A geminate marker /Q/ in Japanese counts as one mora, even though it cannot form a syllable on its own, and this is also reflected in *kana* writing of it, ‘っ’. Icelandic names such as *Diðrik* and *Frðrik* will therefore likely also be pronounced with a geminate. However, the first element of a geminate /Q/ counting as one mora in a word, is said to be one of the difficulties for learners of Japanese to acquire both in perception and production. It is possible that there is a difference in the choice of transliterated type according to the three groups of subjects.

2.2.2 Unaspirated plosives: Japanese plosives may be either voiced or voiceless, whereas Icelandic plosives are categorized by aspiration. According to Pind (1996), the perceptual boundaries of VOT (voice onset time) in aspirated and unaspirated Icelandic plosives is around 33 msec to 40 msec, depending on the place of articulation and speech rate. On the other hand, the voiced alveolar plosive in Japanese has around -35 msec VOT, contrasting with a voiceless counterpart of around 30 msec VOT (Homma, 1986). The VOT in Japanese voiceless plosives lies around the VOT boundary of aspirated and unaspirated plosives in Icelandic. What is unaspirated in Icelandic might sound like a voiceless plosive to Japanese speakers.

³ 1st years: 190 hours study in class, 2nd years: 380 hours study in class.

Whether the three groups of subjects would transliterate unaspirated Icelandic plosives as voiced or voiceless Japanese plosives remains to be seen.

2.2.3 Nasal plosion: In English, nasal plosion occurs in words such as *button* and *garden*, and involves a /t/ (or /d/) sound which is present also in the spelling of the words, and which is followed by an additional vowel when it is transliterated into Japanese, i.e. /bo ta N⁴/, /ga a de N/. In Icelandic nasal release, there is no 't' in the spelling, even though the sound is the same as in the English examples. To insert /t/ followed by a vowel, would add two sounds to the transliterated word, and whether Icelandic learners of Japanese would choose such a version or not is to be seen.

2.3 Procedure: Separate recordings were made of all the names pronounced by a native speaker of Icelandic (recording I) and the possible pronunciations in Japanese, as read by a native speaker of Japanese (recording II). The recording was made with an Edirol R-09HR digital recorder, and the saved sound files played back through computer speakers. First, one name from recording I was played, followed by the possible pronunciations in Japanese from recording II. The subjects heard the tokens only once and chose the Japanese pronunciation (by number) that they thought came closest to the reading by the Icelandic native speaker.

2.4 Results and discussions:

2.4.1 Geminate: From Table 2 below, it appears that the general tendency for Japanese speakers is to insert a geminate, /di zu ri k ku/, /fu ri zu ri k ku/. Icelandic speakers on the other hand, tend to prefer the pronunciation without geminate, /di zu ri ku/, /fu ri zu ri ku/. Vowel lengthening /R/ is not a popular choice in any of the groups. A slight difference is observed between 1st and 2nd year students of Japanese: none of the 2nd years chose the geminate, whereas among the 1st years, the number of speakers who chose the geminate is equal to the number who did not. This may suggest that 2nd year students differentiate clearly between these two types, and seems to indicate that after two years of study, students have developed the ability to distinguish the presence or absence of the geminate in Japanese, but consider transliterations without a geminate to come closer to the original Icelandic sound.

	1 st year	2 nd year	Japanese
/iQku/	11 46%	0 0%	14 78%
/iRku/	2 8%	2 12%	0 0%
/i#ku/	11 46%	14 88%	4 22%

Table 2. Choice of pronunciation for names that contain geminate /Q/. In these tables, rounded percentages (as indicated) do not always add exactly to 100%.

2.4.2 Unaspirated plosives: All three groups of subjects seem to prefer the voiced version to transliterate unaspirated plosives. Since Icelandic plosives are aspirated or unaspirated, Icelandic students of Japanese often have difficulty in perceiving and producing voiced and voiceless contrasting sounds in Japanese words. This could be the reason why Icelandic subjects do not show a clearer tendency here. For Japanese speakers on the other hand, Icelandic unaspirated plosives may not always be perceived as voiced plosives in Japanese due to the different boundaries in VOT. No clear difference between 1st and 2nd year subjects is evident.

Table 3. Choice of names that contain		1 st year	2 nd year	Japanese	pronunciation for unaspirated plosives.
	Voiceless	44 35%	30 38%	22 25%	
	Voiced	83 65%	50 63%	67 75%	

Although in general, both Japanese and Icelandic subjects chose the voiced version,

⁴ /N/ represents moraic nasals in Japanese, i.e. [m][n][ɲ][ŋ][N].

results vary depending on the individual names, and seem rather inconsistent. No special tendency is observed with respect to the environment of the sound in question. (For example, VOT is known to be sensitive to the place of articulation and the vowel that follows it).

2.4.3 Nasal plosion: There is a clear tendency for Icelandic subjects to prefer /n/ without inserted /t/. When /t/ is inserted, a vowel /o/ has to be inserted following /t/, since consonant clusters are not allowed in Japanese and Icelandic speakers seem to avoid this double insertion. On the other hand, Japanese speakers prefer /ton/ or /Qton/, both of which involve inserted /t/ and /o/. No Icelandic subject selected a geminate, whereas three of the Japanese did. Both 1st and 2nd year students of Japanese showed similar tendency.

	1 st year	2 nd year	Japanese
/-run-/	44 86%	26 78%	4 11%
/-ruton-/	5 10%	5 15%	18 50%
/-Qton-/	0 0%	0 0%	3 8%
/-ruQton-/	2 4%	2 6%	11 31%

Table 4. Choice of pronunciation for names that contain nasal plosion.

3. Summary and conclusions Although the second year students seem to have learned the moraic geminate, they either find the translation unsatisfactory, or need more training to become comfortable with the Japanese sound perception. First year students have not learned the sound yet, and Japanese subjects instinctively follow the established rule. In the case of unaspirated plosives, students generally seem to understand the sound and accept the transliteration rule; i.e. unaspirated plosives in Icelandic are categorized as voiced plosives in Japanese, although considerable individual differences were observed. In the case of nasal plosion, Icelandic students, although able to recognize the sound, again seem to disagree with the transliteration rule, preferring not to insert 'to' in the same way as for English loan words with the same sound. The transliteration of Icelandic names confronts students with problems which typically present a challenge in the pronunciation of other words in the target language. The results suggest that students begin to acquire these foreign sounds within a relatively short period of time, by regular, though limited exposure to the target language. However, they do not necessarily accept the customary transliteration rules, which lead to their making different transliteration choices than native Japanese speakers. This agreement might be solved by giving more attention to teaching loan words and familiarizing students with the Japanese sound. Further study is needed to establish whether the trends apparent here would hold good for a larger body of data.

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